# BACKGROUND & CONTEXT

## 1. INTRODUCTION

Welcome to the Long-Range Strategic Plan for Washington State Ferries (WSF). This Plan is intended to guide WSF's future service and investment decisions through the year 2030. Developed with extensive input from the public and stakeholder groups, the Plan outlines the service changes, vessel purchases and terminal improvements that will allow WSF to meet the growing demand for ferry travel. This is a Draft Plan for public review and comment (see sidenote). The Plan comes in three pieces:

- The document you are reading is a *Strategic Service & Investment Plan* that presents key findings and the draft action plan.
- A second document, *Plan Development and Options Analysis*, provides a more detailed discussion of the plan development process.
- Technical Appendices present additional supporting information.

The WSF Long-Range Plan will become a part of the Washington State Transportation Plan (WTP), which is scheduled for adoption by the WSTC in 2006. The WTP is required by state law and will form the basis for setting the state transportation system's investment priorities.

# 1.1 Why update the Plan now?

WSF is releasing this Draft Strategic Plan at an important juncture in the history of ferry transportation in Washington. Demand for ferry service is projected to rise sharply, but the system is constrained by tight financial resources, limited carrying capacities, and aging vessels and terminals. A new and updated Plan will help WSF navigate the present environment and set a future course in a way that best serves customers and taxpayers over the long term. The Plan will guide key policy decisions in the following areas:

**Long-Term Funding.** Much has changed since the last Strategic Plan for WSF was completed in 1999—most profoundly the Legislature's implementation of the I-695 budget cuts, which substantially reduced dedicated funding for the ferry system. The lost funding for ferries has resulted in much greater uncertainty about the reliability of future public funding for ferry capital and operating support. The Plan identifies funding needs over the next 25 years.

**Role of Fares in Long-term Funding.** One of the impacts of the lost funding has been a significant increase in fares over a relatively short period. Since 2000, fares have increased between 60% and 108%. There is considerable debate regarding the appropriate cost sharing relationship between taxpayers and customers, not only for operations but also in terms of capital investment requirements.

# How does the Draft Plan relate to the forthcoming Legislative Ferry Finance Study?

During the 2006 legislative session, the Legislature directed "the Joint Transportation Commission (JTC) to conduct a finance study of the Washington state ferry system. The purpose of the study is to facilitate policy discussions and decisions by the members of the legislature regarding the Washington state ferry system. The study is to be complete by January 1, 2007.

The legislature recognizes there is a need within the Washington State ferry system for predictable cash flows, transparency, assessment of organizational structure, verification that the Washington State ferry system if operating at maximum efficiency, and better labor relations." (SSB 6241)

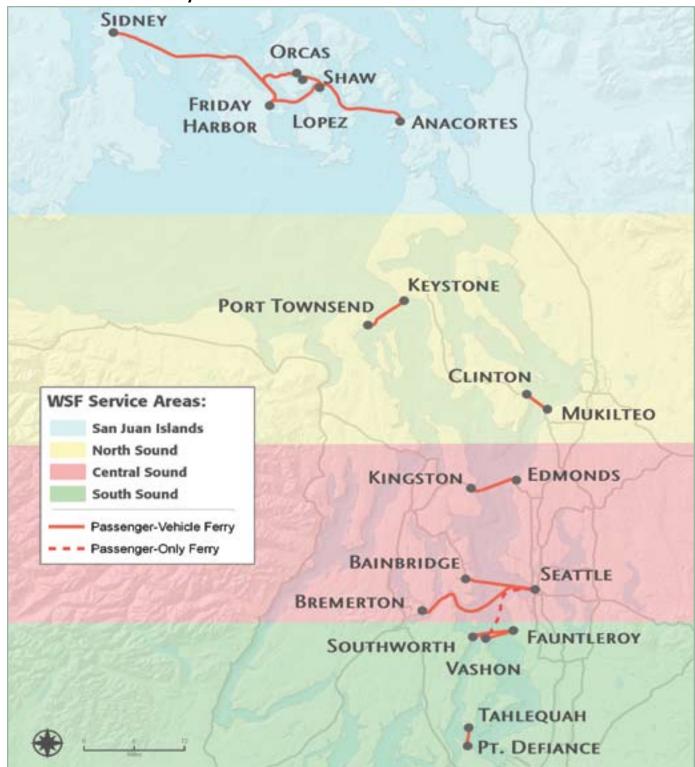
This Long-Range Strategic Plan will provide a technical foundation from which these critical legislative policy issues can be discussed and evaluated.

The Draft Plan planning process also provides a forum for the public, ferry customers, and key stakeholders to weigh in on the Plan recommendations and the key policy issues facing the ferry system.

The relationship between the JTC study and this Long-Range Strategic Plan is two way. This Plan will provide an indication of the financial needs to meet projected traffic demand and the JTC study will develop financial and funding recommendations that will need to be incorporated into this Plan in early 2007.



**Exhibit 1: Current WSF System** 



Source: Berk & Associates, 2006

**Capital Investments.** A long-range plan is necessary because decisions about ferry service have long-term implications. There are significant lead times required to build new vessels or improve terminals, so WSF must anticipate the future need for such improvements today. Also many of WSF's terminals and vessels are near the end of their useful lives and must be replaced or rebuilt to ensure continuation of reliable service.

**Growth and Service Expansion.** There is considerable population growth expected in all of the communities served by WSF. As a part of the state highway system, ferry services are an integral element in the transportation network that will support the expected growth. There are key policy choices regarding how and when service is expanded, the right mix of facility and vessel investments that will support efficient operations and the tensions between customer convenience, community desires and effective asset utilization.

# 1.2 About Washington State Ferries

Since its creation in 1951, WSF has become the largest ferry system in the nation. Over 24 million people currently ride on WSF annually—more than travel on Amtrak. WSF operates 28 vessels and 20 ferry terminals throughout Puget Sound, from Point Defiance in the south to Sidney, B.C. in the north. Commuters, employers, students, commercial shippers and tourists all count on WSF for safe, reliable transportation across the Sound.

### Is this the final plan?

This is the Draft version of the Long-Range Strategic Plan. It was released for public comment on April 3, 2006. A final version of this Plan will be adopted in summer of 2006, following a public comment period that will include a series of public meetings.

Public review documents are available from WSF, online at http://www.wsdot.wa.gov/ferries/your\_wsf/planning or by calling 206-515-3913.

**Exhibit 2: A Comparison of Ferry Systems (2003)** 

	Nation	Passengers (millions)	Vehicles (millions)	Vessels	Terminals
	U.S.A.	25.1	10.8	28	20
<b>≈</b> BCFerries	Canada	21.3	8. 1	35	47
▼ Scandlines	(Baltic Sea)	19.9	4.7	26	8
Caledonian MacBrayne	Scotland	4.9	1.9	29	40
Color Line	Norway	4.1	0.7	9	8
<b>МОВУ</b>	Italy	2.9	0.9	16	n/a
SEAFRANCE	France	2.7	1.0	4	2
* Blue Star Ferries	Greece	2.5	0.5	13	n/a
I MINOAN LINES	Greece	1.8	0.4	11	13
	U.S.A.	0.3	0.2	9	20

Source: BC Ferries, from ferry operator annual reports, 2003



# **Key Milestones in WSF History**

#### 1888

A steam-driven side-wheeler ferry runs between downtown Seattle and West Seattle.

#### Early 1900's

Several companies provide ferry service around Puget Sound, using small steamers collectively known as the "Mosquito Fleet."

#### 1929

The local ferry industry consolidates into two companies: the Kitsap County Transportation Co. and the Puget Sound Navigation Co.

#### 1935

A strike forces the Kitsap County Transportation Company out of business, leaving the Puget Sound Navigation Co., commonly known as the Black Ball line, with primary control of ferry service on Puget Sound.

#### Late 1940's

Ferry workers' labor unions succeed in securing higher wages from the Puget Sound Navigation Company.

#### 1951

Puget Sound Navigation Company sells all of its terminal facilities and ferries (with the exception of the Seattle/Port Angeles/Victoria, B.C. route) for \$5 million to a newly created Washington Toll Bridge Authority.

#### 1953

Washington State commissions the Puget Sound Dredge and Bridge Company (subsequently Lockheed) to build the first Evergreen State-class vessel, which carries 100 vehicles and 1000 passengers.

#### 1959

The State Legislature rejects a plan to build numerous cross-sound bridges. At this time, responsibility for managing the ferry system is shared by the Toll Bridge Authority and the State Highway Commission.

#### 1967

The Super-class ferries Hyak, Kaleetan, Yakima and Elwha are built, each able to carry 160 cars and 2500 passengers.

#### 1973

The Jumbo-class Spokane and Walla Walla ferries are built, with a capacity of 2000 passengers and 206 vehicles each.

#### 1974

Port Townsend/Keystone route taken over from Olympic Ferries

#### 1977

The WSDOT Marine Division is created and given responsibility for ferry services.

### Early 1980's

The Issaquah-class Issaquah, Kittitas, Chelan, Kitsap, Cathlamet and Sealth ferries are added, each able to carry 1200 passengers and 100 cars.

#### 1986

Seattle/Bremerton Passenger-Only Ferry begins.

# Seattle/Vashon Passenger-Only Ferry begins. 1997-99

The fleet is expanded with the arrival of the Jumbo Mark II-class vessels Tacoma, Puyallup and Wenatchee. Each vessel carries 2500 passengers and 212 vehicles. Construction of the Chinook, a new high-speed passenger-only ferry, is completed.

As part of the Washington State Department of Transportation (WSDOT), WSF serves two essential transportation functions.

**Marine highway.** WSF is an essential part of the highway network in Western Washington. Its 200 miles of marine highway provide links between urban areas on the east side of Puget Sound, growing communities on the Kitsap Peninsula, and more rural destinations on the Olympic Peninsula and the San Juan Islands. For communities on Vashon Island and the San Juan Islands, WSF is the link to the mainland for personal and commercial vehicles.

That commercial vehicle connection is essential; island communities depend on ferries to transport goods—including basic supplies and local products—to and from the wider market. WSF makes special efforts to support commercial traffic:

- Vessels and terminals are specially constructed to accommodate the volume, height, weight and turning radius of commercial trucks.
- A dedicated "Haz Mat" sailing runs to and from Vashon Island each day, delivering fuel, solvents and other hazardous materials.
- In the San Juan Islands, commercial vehicles have priority loading through a reservation system.

**Transit agency.** Ferries are people-movers. WSF is the second largest transit system in Washington State, behind King County Metro. Ferries carry almost three people for every vehicle carried, excluding motorcycles and large trucks (2003 data). Ferry terminals connect passengers to many modes of transportation besides personal driving, including pedestrian, bicycle, vanpool, bus, trolley and commuter rail. In addition, WSF actively promotes congestion-reducing options; offering priority loading for bicycles, vanpools and carpools; and coordinating schedules with other transit agencies.

#### 1 FERRY = 60 BUSES

The vessel that serves WSF's busiest commuter route, Bainbridge Island to Seattle, can carry 2,500 passengers per trip. That is the equivalent of 208 12-seat vanpools, 60 40-foot buses, or 17 commuter rail cars.

# 2. POLICY FRAMEWORK

WSF is part of the Washington State Department of Transportation, a cabinet agency reporting to the Governor. In addition to the Governor's office, ferry service and investment decisions are guided by the following:

- The state Legislature passes laws about ferry service, sets the biennial budget for ferry operations and maintenance, and appropriates funds for WSF's capital needs. The Legislature's Joint Transportation Committee researches and oversees all aspects of the state's transportation system, including the ferry system.
- The Washington State Transportation Commission (WSTC) is an independent oversight agency, whose seven members are citizens appointed by the Governor and confirmed by the state Senate. Among the Commission's charges is oversight of ferry policies, including policies on fares and service levels. The Commission is also charged with the development of a "comprehensive and balanced" and financially realistic state Transportation Plan, of which WSF's Long-Range Plan will become a part.
- WSF is part of the Washington State Department of Transportation, which integrates ferry service with other parts of the highway system and has many other transportation responsibilities in the Puget Sound region and around the state.

# 2.1 Washington Transportation Plan

The WSF Long-Range Plan will become a part of the Washington Transportation Plan (WTP), a blueprint for transportation programs and investments in Washington. State and federal law require that the WTP be updated regularly; this update will be adopted by the Transportation Commission in 2006, encompassing the period 2007-2026, and will form the basis for a funding proposal to the Legislature in 2007.

The WTP covers every mode of the state's transportation system. Because this Long-Range Plan will constitute the modal plan for ferries, it is guided by the same goals which federal and state law prescribe for the WTP, including safety, congestion relief, asset preservation, system efficiency, environmental protection and consistency with land use plans (Exhibit 3). The WTP is also intended to be a useful tool for transportation decision makers; this is accomplished by relying on careful analysis of empirical data, and by advancing proposals that identify financial realities and the need for prioritization.

**Exhibit 3: What are the Goals and Components of the State Transportation Plan?** 

Federal Planning Factors	State Planning Emphasis Areas	Required Modal Plans
(23USC135)	(RCW 47.06)	(RCW 47.06)
<ul> <li>Support the economic vitality of the United States, the State, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency.</li> <li>Increase the safety and security of the transportation system for motorized and non-motorized users.</li> <li>Increase the accessibility and mobility options available to people and for freight.</li> <li>Protect and enhance the environment, promote energy conservation, and improve quality of life.</li> <li>Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight.</li> <li>Promote efficient system management and operation.</li> <li>Emphasize the preservation of the existing transportation system.</li> </ul>	<ul> <li>Relief of congestion.</li> <li>Preservation of existing investments.</li> <li>Preservation of downtowns.</li> <li>Ability to attract or accommodate planned population and employment growth.</li> <li>Improvement of traveler safety.</li> <li>Efficient movement of freight and goods.</li> <li>Improvement and integration of all transportation modes to create a seamless intermodal transportation system for people and goods.</li> </ul>	<ul> <li>State-owned</li> <li>Highways</li> <li>Ferries</li> </ul> State Interest <ul> <li>Aviation</li> <li>Public Transportation</li> <li>Freight Rail</li> <li>Intercity Passenger Rail</li> <li>Bicycle &amp; Pedestrian</li> <li>Marine Ports &amp; Navigation</li> </ul>

Source: Washington State Transportation Commission

# 2.2 What is the goal of this Plan?

The primary goal of this Long-Range Plan is to prepare WSF to provide ferry service that is best able to meet projected customer demand, which is primarily a function of local economic conditions and land use policies which will determine where people are likely to work and live in the future. This goal is in keeping with WSF's role and mission, as part of the state highway system, to move passengers and vehicles across Puget Sound.

In 1994, the Washington State Transportation Commission adopted level-ofservice (LOS) standards for WSF. These congestion standards were developed as part of a larger effort among local governments and modal transportation agencies to respond to requirements of Washington's Growth Management Act, with the understanding that plans for future growth would be closely tied to maintaining LOS standards.

To quantify LOS, WSF chose to measure congestion delay, expressed as the number of vessels that sail before a vehicle can board. WSF measured the average delay over the course of the busiest time of day (3 PM to 7 PM) on an average weekday and deemed this measurement "boat-wait."

For vehicles, the boat-wait standards were set to 1-boat-wait for most routes. On those routes, WSF would meet its LOS standard if the average vehicle arriving for sailings between 3 PM and 7 PM saw no more than one vessel sail before it was able to board. Seattle-Bainbridge was given a 2-boat-wait standard in order to equalize its overall average trip time with Seattle-Bremerton, and Mukilteo-Clinton

was given a 2-boat-wait standard because of its exceptionally short headways.

For passengers, the boat-wait standards were set to O-boat-wait for all routes, meaning no walk-on passengers during the afternoon peak period should ever be denied entry to their first available sailing due to capacity constraints.

The service and travel patterns in the San Juan Islands do not lend themselves to the same definition of peak congestion. These routes do not serve a commuter market and, because of route length, headways are naturally longer, making a 4-hour analysis impractical and boat-wait measurement not applicable. As a result, daily and seasonal capacities are tracked for the San Juan Island routes and service growth is designed to keep up with traffic growth.

# 2.3 What other factors must WSF consider?

In identifying and evaluating possible ways to meet projected ridership demand, WSF and WSDOT must also consider other guidelines for ferry service that come from the Legislature and the Transportation Commission, and the people these entities represent and serve. Not all of this guidance takes the form of law or absolute mandate, and often it reflects multiple priorities—at times conflicting—which WSF must take seriously and endeavor to balance as it plans to meet demand in the future. Guidelines for ferry service include the following:

### WSF should charge prices that are reasonable and equitable.

The Washington State Transportation Commission sets policies that guide WSF's fare structure. In addition to fiscal and environmental considerations, the Commission must, per Legislative direction, consider the "desirability of reasonable rates for persons using the fee

consider the "desirability of reasonable rates for persons using the ferry system to commute daily to work and (for) other frequent users who live in ferry-dependent communities" (RCW 47.60.326).

### WSF should act responsibly with regard to the natural environment.

WSF has been an active partner in efforts to protect the natural environment, recently as host of a pilot study of alternative fuels and on an everyday basis in its efforts to encourage transit use and vehicle sharing. This is in keeping with the Legislature and the Transportation Commission's charge to "conserve nonrenewable natural resources including land and energy (RCW 47.01.071)."

In developing the Long-Range Plan, WSF assessed any capital project or service change under consideration to ensure it has no "fatal flaw" from an environmental

# What are the congestion standards set by the Washington State Transportation Commission? (Boat-Wait Standards)

# Non-motorized Travel and High Occupancy Vehicles (HOV)

 Accommodate all pedestrians, bicyclists and registered HOVs on each sailing (0 boat-wait)

### **Freight and Goods Movement**

- Westbound weekday traffic on Seattle-Bremerton and Edmonds-Kingston between 5:00 a.m. and 2:00 p.m. – 0 boat-wait
- Eastbound weekday traffic on Seattle-Bremerton and Edmonds-Kingston between 9:00 a.m. and 3 p.m. – 0 boat-wait
- San Juan Island 0 boat-wait for pre-registered commercial vehicles
- Level of service for freight in other routes determined by general traffic LOS goals

### **General Traffic**

All Routes Except San Juan Islands: Average Boat-wait standard, Westbound Weekday PM Peak, 3:00 p.m. – 7:00 p.m.

- Port Townsend-Keystone 1 boat-wait
- Mukilteo-Clinton 2 boat-wait
- Edmonds-Kingston 1 boat-wait
- Seattle-Bainbridge 2 boat-wait
- Seattle-Bremerton 1 boat-wait
- Fauntleroy-Vashon-Southworth 1 boat-wait
- Point Defiance-Tahlequah 1 boat-wait

# Why is the Seattle-Bainbridge route level of service (LOS) different than other Kitsap routes?

The WSTC set its congestion standards to equalize the overall triptime between Seattle-Bainbridge and Seattle-Bremerton to avoid promoting traffic to one or the other route. Seattle-Bremerton was given an LOS standard of 1-boat-wait, which equates to an average of 75 minutes. Adding the 60 minute crossing time, brings the maximum overall wait to 135 minutes (75+60 = 135 minutes).

Since crossing time on Seattle-Bainbridge is only 35 minutes, the Seattle-Bainbridge average wait-time standard was set to 100 minutes (135-35=100 minutes) to match the overall wait time for Seattle-Bremerton. Since sailings on Seattle-Bainbridge depart once per 50 minutes, this 100-minute wait-time equated to a 2-boat-wait standard.

perspective. Environmental impacts of specific capital facility projects are evaluated during the design development stage when WSF conducts a detailed environmental review as part of an Environmental Assessment or Environmental Impact Statement.

**WSF should plan within its financial constraints.** The ferry system operates in a financially constrained environment. Limited funding is available for operating and capital expenditures, the price of fuel has increased sharply, and the Legislature has a clear expectation that ferries will recover a high percentage of their operating costs through fares and other operating revenues. The present minimum cost recovery target, as determined by the Legislature's Joint Task Force on Ferries (January 2001), is 80%. WSF evaluates different planning scenarios accordingly.

WSF should respect the land use and growth management plans of local governments, while staying mindful of its primary mission and its role as a state agency. WSF serves local communities, which have a strong interest in planning for and managing their own growth and development. State law is clear on the need for WSF to cooperate with planning processes. To this end, WSF makes long-range demand projections based on the regional growth forecasts that result from a cooperative process among local jurisdictions.

WSF's role in growth management is a passive one. Local and regional planning organizations make policy decisions to shape growth: the resulting pattern of future trips are the basis for ferry service planning. This balance of interests is reflected in state law: "Although [WSDOT] shall consult with local governments when setting level of service standards, the department retains authority to make final decisions... [The] department shall consider the necessary balance between providing for the free interjurisdictional movement of people and goods and the needs of local communities using these facilities (RCW 47.06.140)."

WSF should plan facility improvements and service to facilitate connections with other modes of transportation. State law refers to the WTP as "a statewide multimodal transportation plan (RCW47.06)" and specifies that each modal plan should emphasize "the improvement and integration of all transportation modes to create a seamless intermodal transportation system for people and goods (RCW47.06.040)."

**WSF should consult with the public as it develops ferry plans or policy changes.** State law (47.60.330) requires that ferry users be consulted before major service or fare changes, through public hearings, surveys, and standing Ferry Advisory Councils. WSF also consults with ferry terminal neighbors and other interested parties before changes are implemented.

# 3. PLANNING PROCESS

# 3.1 Analytical Approach

# 3.1.1 Four Corridors, One System

For analytical purposes, the ferry system can be divided into four "travel corridors": San Juan Islands (which includes Anacortes and Sidney, B.C.), North Puget Sound, Central Puget Sound, and South Puget Sound. Every route is part of a corridor and each corridor represents a relatively self-contained travel market. Interactions between corridors—including shifting riders and shared resources—are critically important, but the corridor level is a useful starting point for analysis.

# 3.1.2 A Three-Step Planning Process

In developing the Draft Plan, WSF first identified the challenges in each travel corridor, then identified and evaluated possible service scenarios that would meet the needs in each corridor, and, finally, selected the most effective option for each corridor. The corridor-specific preferred scenarios were then merged into a system-wide plan.

### **Routes and Travel Corridors**

### **San Juan Islands Corridor**

- Anacortes/Friday Harbor routes
- Inter-Island routes
- International route

### **North Puget Sound Corridor**

- Port Townsend-Keystone
- Mukilteo-Clinton

### **Central Puget Sound Corridor**

- Edmonds-Kingston
- Seattle-Bainbridge Island
- Seattle-Bremerton

### **South Puget Sound Corridor**

- Seattle-Vashon Island passenger-only route
- Fauntleroy-Vashon-Southworth triangle service
- Point Defiance-Tahlequah

## **How was the Draft Plan Developed?**

- 1. Identify the challenges in each corridor, based on projected growth in ridership demand and vessel and terminal constraints.
- 2. Identify possible service scenarios in each corridor and evaluate each scenario using criteria:
  - Operational feasibility
  - Level-of-service impacts (rider wait times)
  - · Customer convenience
  - · Financial impact
  - Implications for capital investments (vessel, terminal)
  - Effects on walk-on ridership levels and local roadways

Identify the most preferable service scenario for each corridor.

3. Merge the preferred scenarios into a system-wide plan. Evaluate this plan against the same criteria, as well as against system-wide constraints such as vessel availability. Adjust as needed before finalizing the Draft Plan.







## Stakeholder Briefings to Date

- City of Seattle
- Kitsap Regional Coordinating Council
- League of Women Voters
- Island County Regional Transportation Planning Organization
- City of Edmonds
- San Juan County Commissioners
- Legislative Staff
- Ferry Advisory Committees

### **Public Meetings to Date:**

- South Sound (Southworth)
- South Sound (Fauntleroy)
- North Sound (Coupeville)
- Central Sound (Bainbridge Island)
- Central Sound (Bremerton)
- San Juans Corridor (Anacortes)
- San Juans Corridor (Friday Harbor)

### 3.2 Public Outreach and Stakeholder Involvement

As part of the long-range planning process WSF has consulted with ferry customers, agency stakeholders and the general public. This outreach is divided into two phases. Phase I, June 2005, focused on WSF's ongoing analysis of key challenges and choices in each service area. Phase II, beginning with the release of the Draft Plan in April 2006, will focus on gathering input on the Draft Plan before it is finalized. WSF's public outreach happens through stakeholder briefings, public meetings, FAC briefings and ongoing communications.

**Stakeholder Involvement.** From April through August 2005, WSF held twelve briefings for interested and affected stakeholder groups to discuss the developing plan and gather input. WSF also worked with stakeholder groups outside of the briefings, exchanging views and information about the plan and its implications for the region.

**Public Meetings (Phase I).** In June 2005, WSF hosted nine public meetings about the Long-Range Strategic Plan. Presented in cooperation with local Ferry Advisory Committees (FACs), each meeting included a presentation about the LRSP and a forum for public questions and comments. WSF convened the Phase 1 meetings to receive feedback and questions on the preliminary results of steps one and two of the three-step planning process, corridor-specific service challenges and possible service scenario options analysis.

The public meetings were publicized through flyers on ferries and at terminals, notices on the WSF web site, alerts and emails to WSF customers and stakeholders, and display ads and articles in local newspapers. In total, 175 members of the public attended the 9 Phase I public meetings.

**Public Comments (Phase I).** WSF solicited public comment via e-mail, telephone or U.S. mail and at Phase 1 public meetings during a question and answer period and through a comment form. The majority of comments came from discussion at public meetings. Generally, the public raised concerns over the increasing fares and effects of ridership on landside traffic. Participants also expressed interest in passenger-only ferries and in increased coordination for intermodal connections landside. (All comments made at meetings or submitted to WSF prior to the release of the Draft Plan are listed in Appendix C.)

**Ongoing Communications.** WSF established a Long-Range Plan website to communicate with the public throughout the development of the Draft Plan. The site provided updates on the planning process, meeting materials, and briefing documents discussing the planning process and key analytical issues.

**Next Steps.** A 45-day comment period follows the release of this Draft Plan. During this period WSF will host at least nine public meetings in the communities it serves and will continue to communicate with stakeholders agencies. The Long-Range Strategic Plan website will continue to offer project updates and any other new materials related to the Plan.